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-continued

[Chemical Formula 2b]

10. The organic photoelectronic device of claim 1, wherein the organic photoelectronic device shows a light absorption curve having a full width at half maximum (FWHM) of about 50 nm to about 150 nm.

11. The organic photoelectronic device of claim 1, wherein the active layer selectively absorbs light in a green wavelength region.

12. The organic photoelectronic device of claim 1, wherein the active layer includes an intrinsic layer including the p-type semiconductor and the n-type semiconductor in a ratio of about 1:100 to about 100:1.

13. The organic photoelectronic device of claim 1, wherein the active layer includes an intrinsic layer including the p-type semiconductor and the n-type semiconductor in a ratio of about 1:10 to about 10:1.

14. The organic photoelectronic device of claim 12, wherein the active layer further comprises a p-type layer including the p-type semiconductor.

15. The organic photoelectronic device of claim 12, wherein the active layer further comprises a n-type layer including the n-type semiconductor.

16. The organic photoelectronic device of claim **1**, further comprising:

a charge auxiliary layer between at least one of the first electrode and the active layer, and the second electrode and the active layer.

17. An image sensor comprising the organic photoelectronic device of claim 1.

18. The image sensor of claim 17, further comprising:

a semiconductor substrate integrated with a plurality of first photo-sensing devices sensing light in a blue wavelength region and a plurality of second photosensing devices sensing light in a red wavelength region;

a color filter layer on the semiconductor substrate, the color filter layer including a blue filter selectively absorbing light in a blue wavelength region and a red filter selectively absorbing light in a red wavelength region,

wherein the organic photoelectronic device is on the color filter layer and selectively absorbs light in a green wavelength region.

19. The image sensor of claim 17, wherein the organic photoelectronic device is a green photoelectronic device,55 further comprising:

a blue photoelectronic device selectively absorbing light in a blue wavelength region; and

a red photoelectronic device selectively absorbing light in a red wavelength region,

wherein the organic photoelectronic device, a blue photoelectronic device and a red photoelectronic device are sequentially stacked.

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